

Huawei CloudEngine S12700E Series Switches

Industry-Leading Core Switches Ideal for Campus Networks

Campus Network Trends in the Wi-Fi 6 Era

A new digital economy is sweeping across the globe. Within this trend, Wi-Fi 6 and IoT are emerging as two disruptive forces, driving the explosive growth of terminals and data traffic on campus networks. This, in turn, is bringing unprecedented challenges to campus network infrastructure, with particularly high requirements on performance, reliability, security, and openness. Additionally, intent-driven networks are becoming the cornerstone of digital transformation and will drive the evolution of enterprise campus networks for years to come. Campus networks will disrupt the traditional user or device-centric approach and drive us towards a new era centered on service experience.

To keep up with the rapidly changing campus networks, Huawei has launched next-generation CloudEngine S series switches tailored for the global campus network market. Built on Huawei's own high-performance chipsets, these all-new switches stand out with ultra-fast forwarding, full-stack openness, and programmable architecture. By deploying these feature-rich switches, customers can build a fully-connected, service-assured, and smoothly evolvable high-quality campus network, accelerating digital transformation across industries.

Brand-New Flagship Core Switches

CloudEngine S12700E is a brand-new flagship core switch in Huawei's CloudEngine S series switch family. Designed with an industry-leading distributed switching architecture and built on Huawei's high-performance chipsets, CloudEngine S12700E provides compelling features such as high-quality massive data exchange, unmatched wired and wireless convergence, all-layer openness, and smooth network upgrades. Leveraging such advantages, customers can easily upgrade their traditional campus networks to become service experience-centric, intelligent, and simplified.

CloudEngine S12700E is available in three models: S12700E-4, S12700E-8, and S12700E-12. Such flexibility makes CloudEngine S12700E ideal for campus network deployments of varied user scales.

CloudEngine S12700E: Brand-new campus core ideal for the Wi-Fi 6 era



CloudEngine S12700E-4

CloudEngine S12700E-12

CloudEngine S12700E-8

Features and Highlights

Ultra High Performance

- **Large switching capacity:** The switching capacity of a single device is up to 57.6 Tbps, six times the industry average.
- **High port density:** A single device supports up to 288 x 100GE ports, the highest 100GE port density in the industry.
- **Large management scale:** The entire system manages 10K APs and allows 50K concurrent users, delivering two times higher AP management capacity than a standalone WLAN AC.

Ultra High Reliability

- **Large switching capacity:**
 - The distributed switching architecture separates the main control board from the switching board, providing carrier-grade service reliability of more than 99.999%. The switching boards can be configured on demand to achieve flexible capacity expansion.
 - Fan modules work independently, adopt redundancy design, and support intelligent speed adjustment. Such a design ensures the failure of a single fan module does not affect the normal running of the entire device.
- **High port density:** Innovative cell switching technology is designed with a dynamic load balancing algorithm to ensure non-blocking switching in high-concurrency and full-load operating environments.

Unmatched Agility and Openness

- **Fast service rollout:** Fully programmable chipsets make it easy to provision new services and features through software programming without hardware upgrade, accelerating business monetization.
- **Extensive interoperability:** The proven interoperability with mainstream vendors' more than 10 proprietary protocols, over 400 network device models, and in excess of 30 authentication/NMS systems to facilitate smooth network upgrades.

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